

### IN THE CLAIMS

Please amend the claims as follows:

1. (Previously Presented) A tankless system comprising:  
a membrane module having an inlet connected to a feed line, the membrane module having a concentrate outlet coupled to a concentrate line, and the membrane module having a permeate outlet coupled to a permeate line, the permeate line communicating with a faucet; and  
a flush reservoir communicatively coupled between the permeate line and the feed line;  
wherein the system is configured such that permeate does not enter the flush reservoir while the faucet is turned on, and permeate does not enter the flush reservoir until after the faucet is turned off, when a portion of permeate is delivered to the reservoir and then delivered to the inlet of the module to flush the module.
2. (Previously Presented) The system of claim 1, including a first check valve between the permeate outlet and the faucet and a second check valve between the permeate outlet and the flush reservoir.
3. (Original) The system of claim 1, including an automatic shut-off valve coupled between the permeate line and the feed line and operative to open the feed line when the faucet is opened based on a pressure differential between the feed line and the permeate line.
4. (Original) The system of claim 1, including a check valve between the permeate line and the flush reservoir.
5. (Original) The system of claim 1, including a check valve between the reservoir and the feed line.
6. (Original) The system of claim 1, wherein the feed inlet delivers feed water to the module at about 75 psi or less.

7. (Original) The system of claim 1, wherein the reservoir has a volume of about 1 liter or less.

8. (Currently Amended) ~~[[The ]]~~A system of claim 1, further comprising:  
a membrane module having an inlet connected to a feed line, the membrane module having a concentrate outlet coupled to a concentrate line, and the membrane module having a permeate outlet coupled to a permeate line, the permeate line communicating with a faucet; and  
a flush reservoir communicatively coupled between the permeate line and the feed line;  
wherein the system is configured such that permeate does not enter the flush reservoir while the faucet is turned on, and permeate does not enter the flush reservoir until after the faucet is turned off, when a portion of permeate is delivered to the reservoir and then delivered to the inlet of the module to flush the module;

an automatic shut-off valve coupled between the permeate line and the feed line and operative to open and close the feed line;

a first check valve between the permeate line and the flush reservoir; and

a second check valve between the flush reservoir and the feed line, wherein the automatic shut-off valve closes in response to a first pressure, the check valve between the permeate line and the flush reservoir opens in response to a second pressure, and the check valve between the reservoir and the feed line opens in response to a third pressure, the first pressure less than the other pressures, and the second pressure less than the third pressure.

9. (Currently Amended) A ~~tankless~~ system comprising:

a membrane module having an inlet connected to a feed water line, the membrane module having a concentrate outlet coupled to a concentrate line, and the membrane module having a permeate outlet coupled to ~~[[a ]]~~an unfiltered permeate line, the unfiltered permeate line communicating with a faucet;

a control coupled between the permeate line and the feed line and operative to open the feed line when the faucet is opened based on a pressure differential between the feed line and the permeate line; and

a reservoir coupled between the permeate line and the feed line, wherein the system is configured to not sent any permeate to the reservoir while the faucet is open and then to temporarily fill the reservoir with an amount of permeate after the faucet is closed and to deliver the amount of permeate to the module inlet via the feed line.

10. (Original) The system of claim 9, wherein the control includes a non-electric automatic shut-off valve.
11. (Original) The system of claim 9, wherein the feed line delivers water from a feed source at home water pressure conditions.
12. (Original) The system of claim 9, including a one-way check valve between the permeate line and the faucet and operative to maintain pressure in the line after the faucet is closed.
13. (Previously Presented) The system of claim 12, including a second one-way check valve between the permeate line and the flush reservoir and operative to allow permeate flow to the flush reservoir only after the faucet is closed.
14. (Original) The system of claim 9, including a one-way check valve between the flush reservoir and the feed line and operative to allow flow from the flush reservoir to the feed line after the feed line is shut off by the control.
15. (Previously Presented) The system of claim 9, wherein there is not a permeate storage tank communicating with the permeate outlet.
16. (Previously Presented) A method comprising:  
delivering a permeate from a permeate outlet of a membrane module to a faucet and while delivering permeate to the faucet, not delivering permeate to a flush reservoir;

after the faucet is closed, delivering permeate to the flush reservoir from the permeate outlet; and

delivering the permeate in the flush reservoir to a feed water inlet of the membrane module to flush the membrane module.

17. (New) The system of claim 8, wherein the reservoir has a volume of about 1 liter or less.

18. (New) The system of claim 8, wherein the feed inlet delivers feed water to the module at about 75 psi or less.

19. (New) The system of claim 8, wherein the control includes a non-electric automatic shut-off valve.

20. (New) The system of claim 8, wherein the feed line delivers water from a feed source at home water pressure conditions.